





## Making the Linkages Through the Use of Environmental Indicators May 17-20, 2004 • Kansas City, MO

## Agenda

### Monday, May 17, 2004

5:00 pm - 7:30 pm **REGISTRATION** 

5:30 pm – 7:30 pm **POSTER SESSION** - Center Court Fountain

## Tuesday, May 18, 2004

7:30 am – 6:00 pm **Registration** 

**PLENARY SESSION** - Morelia Room

8:00 am – 8:30 am **Welcome** 

Brenda Groskinsky, Science Liaison, U.S. EPA, Region 7 - Workshop Chair

Antoine Provost, Chair, Regional Tribal Operations

Ron Hammerschmit, Director, Kansas Department of Health and Environment

8:30 am – 9:30 am Indicator Soup - NAPAP, EMAP, GPRA, and Salt to Taste

What is an indicator and why do we use them?

What are the drivers behind the use of environmental indicators?

Rick Linthurst, Ph.D., Senior Science Advisor, Office of Inspector General, U.S. EPA

9:30 am - 10:30 am Challenges of Using Environmental Indicators for Performance Measurement

Jay Messer, Ph.D., Senior Science Advisor, National Center for Environmental Assessment,

Office of Research and Development, U.S. EPA

10:30 am - 11:00 am **BREAK** 

PLENARY SESSION - Morelia Room

11:00 am – 12:00 pm Indicators: The Basic Model

Sustainable Development and Management: '92 International Rio Conference and International World Summit on Sustainable Development - Human Health, Social and

Economic Indicators

Ted Heintz, President's Council for Environmental Quality

12:00 pm – 1:00 pm **LUNCH** - On Your Own

1:00 pm - 2:00 pm The State of the Nation's Ecosystem: Ecosystem and Natural Resource Indicators

Kent Cavender-Bares, Heinz Center







2:00 pm – 3:00 pm **EPA Report on the Environment** 

Michael Flynn, Deputy Director, Office of Information Analysis and Access, Office of

Environmental Information, U.S. EPA

3:00 pm – 3:30 pm **BREAK** 

3:30 pm – 4:30 pm Environmental Measures

Ian Dutton, Director, Conservation Measures Group, The Nature Conservancy

4:30 pm - 5:00 pm A Broad Overview of Tribal Perspective on Environmental Concerns and

**Performance Indicators** 

Virgil Masayesva, Director, Institute for Tribal Environmental Professionals

5:00 pm – 5:30 pm **Preview of Wednesday Sessions** 

Brenda Groskinsky, R7 Science Liaison, U.S. EPA

Patti Tyler, R8 Science Liaison, U.S. EPA

6:00 pm Social Hour

## Wednesday, May 19, 2004

7:15 am – 4:30 pm **REGISTRATION** 

7:15 am – 8:00 am INDICATOR TRAINING - Plaza Bar

(Bring your breakfast)

**Indicator Fundamentals** 

James Bernard, Environmental Management Consulting

8:00 am - 8:30 am Session Charges

Brenda Groskinsky, R7 Science Liaison, U.S. EPA - Morelia I Patti Tyler, R8 Science Liaison, U.S. EPA - Morelia II & III

TOPIC SESSIONS - Morelia Room

8:30 am – 10:00 am **TRACK 1** - Morelia I

How Do We Utilize Indicators at Different Scales?

Landscape to Genetics to Temporal

Moderator - Jay Messer, Ph.D., Senior Science Advisor, National Center for

Environmental Assessment, U.S. EPA







### Molecular Indicators of Genetic Diversity

Mark Bagley, Ph.D., Molecular Ecology Research Branch, National Exposure Research Laboratory, U.S. EPA

Hierarchy, Scale, and the Goldilocks Principle: Getting Indicators Just Right Jay Messer Ph.D., Senior Science Advisor, National Center for Environmental Assessment, U.S. EPA

Indicators and Questions for Vulnerability Assessments at Regional to Local Scales Elizabeth R. Smith, Ph.D., Director, Regional Vulnerability Assessment Program, National Exposure Research Laboratory, U.S. EPA

8:30 am - 10:00 am

TRACK 2 - Morelia II & III

What Have Been the Human Health Impacts Resulting From the Use of Indicators? Moderator – Patricia Murphy, Ph.D., Environmental Health Scientist, Office of Research and Development, U.S. EPA

Groundwater Uranium and Cancer in New Jersey Jerry Fagliano, New Jersey Department of Health

Using Tailings as Agriculture Lime in St. Francis County, Missouri: A First Look
Jeff Patridge, GIS Analyst, Office of Surveillance, Missouri Department of Health
and Senior Services

National Environmental Public Health Tracking Presentation: Use of Indicators Amanda Niskar, Environmental Tracking Branch, Center for Disease Control

10:00 am - 10:30 am

**BREAK** 

10:30 am - 12:00 pm

TRACK 1 - Morelia I

How Can We Use Existing Performance Measures to Convey Environmental Accountability?

Moderator - Rick Durbrow, Program Analyst, U.S. EPA, Region 4

Roundtable Discussion Speakers:

Rick Durbrow, U.S. EPA, Region 4

Joseph Greenblott, Office of the Chief Financial Officer, U.S. EPA

Marjorie Jones, Office of Water, U.S. EPA

Bruce Jones, Ph.D., Senior Scientist, National Exposure Research

Laboratory, U.S. EPA







10:30 am – 12:00 pm **TRACK 2** - Morelia II & III

Is There a Story That We Can Highlight?

Moderator - John Perrecone, Ecosystem Team Manager, U.S. EPA, Region 5

Current Indicator Process at Work: The State of the Lakes Ecosystem Conference (SOLEC) How Did SOLEC Select Meaningful Indicators?

What Monitoring/Assessment Data is Needed to Implement the Indicators?

How Do You Report Indicators in a Meaningful Way to Show Environmental Improvements?

Paul Bertram, U.S. Lead for Indicators Project, Great Lakes National Program Office, U.S. EPA

12:00 pm – 1:00 pm

LUNCH - On Your Own

1:00 pm - 2:30 pm

TRACK 1 - Morelia I

Can Indicators Be Effective On-The-Ground Tools for Local Governments As Well As Effective Tools for Communication With the Public?

Moderator - Joe Francis, Associate Director, Nebraska Department of Environmental Quality

Panel:

Bruce Stein, V.P. Programs, NatureServe

Barbara Sheen-Todd, Commissioner, Pinelas Board of County Supervisors (Florida) Randy Johnson, Commissioner, Hennepin County Commissioners (Minnesota) W. Cecil Steward, President, Joslyn Castle Institute for Sustainable

Communities (Nebraska)

The panel will examine how indicators can be beneficially used at the local level in their every day decisions.

1:00 pm - 2:30 pm

TRACK 2 - Morelia I

What are the Analytical Tools and Models Used to Help Develop Environmental Indicators and How Are They Being Used?

An Interactive, User Friendly, Discussion of the Available Technology and Practical Lessons in Terms of Applying These Tools Towards Developing, Evaluating, and Tracking Indicators

Moderator - Cynthia Curtis, U.S. EPA, Region 5







# Applying Web Services and Creating Distributed Databases for Real-Time Indicators: The NEISEGEI Approach

Brook Hemming, Ph.D., Physical Scientist, National Center for Environmental Assessment, U.S. EPA

Snythesizing Multiple Environmental Indicators: Reva's Environmental Decision Toolkit Elizabeth R. Smith, Ph.D., Senior Science Advisor, National Center for Environmental Assessment, U.S. EPA

William A. Jenkins, Jr. - Director, Landscape and Watershed Analysis Division, Maryland Department of Natural Resources

Ming Chang, Office of Information Analysis, U.S. EPA

2:30 pm – 3:00 pm

**BREAK** 

3:00 pm - 4:30 pm

TRACK 1 - Morelia II & III

#### How Has the Use of Thresholds Allowed Us to Measure Success?

#### Air, Children's Health, and Other Specific Programs

Moderator - Mike Hadrick, Senior Advisor for Planning, Office of Air & Radiation, U.S. EPA

#### Session Overview and Outlook - Air Quality Thresholds

Mike Hadrick, Senior Advisor for Planning, Office of Air & Radiation, U.S. EPA

## Use of Regulatory Standards and Thresholds in Constructing Environmental Health Indicators: Advantages and Disadvantages

Tracey Woodruff, Ph.D., Senior Scientist, National Center for Environmental Economics, U.S. EPA

**Spatial and Temporal Distribution of Methylmercury in Fish Tissue in Region 7** Michael Jay, Environmental Scientist, U.S. EPA, Region 7

3:00 pm - 4:30 pm

TRACK 2 - Morelia II & III

What Indicators Can Be Used at the Watershed Level to Measure the Success or Failure of "Landscape" Best Management Practices?

#### Three Case Studies

Moderator - Bruce Jones Ph.D., Senior Scientist, Environmental Sciences Division, National Exposure Research Laboratory, U.S. EPA







# Approaches to Prioritize Networks of Greenspace: The Maryland Green Infrastructure Experience

William A. Jenkins, Jr. - Director, Landscape and Watershed Analysis Division, Maryland Department of Natural Resources

#### Experimental Watershed - South Fork, IA

Mike Burkart, Hydrologist, National Soil Tilth Lab, Agriculture Research Service, USDA

## Comprehensive Research and Management of Impervious Surfaces Impacts on Watershed Hydrology

Bill Schuster, Ph.D., Research Scientist, National Risk Management Research Laboratory, U.S. EPA

### Thursday, May 20, 2004

7:30 am – 12:00 pm **REGISTRATION** 

7:30 am – 8:30 am INDICATOR TRAINING - Plaza Bar

(Bring your breakfast)

James Bernard, Environmental Management Consulting

8:30 am – 9:30 am PREVIOUS DAY REVIEW & CURRENT DAY OVERVIEW

Brenda Groskinsky, Workshop Chair, R7 Science Liaison, U.S. EPA - Morelia I

Patti Tyler, R8 Science Liaison, U.S. EPA - Morelia II & III

9:30 am - 10:00 am **BREAK** 

TOPIC SESSIONS

10:00 am – 11:30 am **TRACK 1** - Morelia I

#### What Ecosystem Indicators Do We Need?

Moderator - Karl Hermann, Senior Analyst, U.S. EPA, Region 8

#### Indicators for Stream Ecology

Roger Blair, Ph.D., Branch Chief, National Health and Environmental Effects Research Laboratory, Western Ecology Division, Office of Research and Development, U.S. EPA

#### Landscape Level Indicators

Douglas M. Muchoney, Ph.D., Program Coordinator, Geographic Analysis and Monitoring, U.S. Geological Survey

#### Indicators of Sustainable Rangelands

Lori Hidinger, Program Manager, Sustainable Biosphere Initiative/Science Programs Office, Ecological Society of America







10:00 am – 11:30 am **TRACK 2** - Morelia II & III

### Social Indicators - How Can They Be Used for Environmental Decision Making?

Moderator - Patti Tyler, R8 Science Liaison, U.S. EPA

#### The Importance of Environmental Indicators in Indian Country

Margaret Cook, Senior Environmental Planner and Policy Analyst, Department of Environmental Quality, Gila River Indian Community

#### Children's Health Indicators

Tracey Woodruff, Ph.D., Senior Scientist, National Center for Environmental Economics, U.S. EPA

### The Central Texas Sustainability Indicator Project: History, Practice and Prospects

Robert Patterson, Ph.D., Director of Graduate Program in Community and Regional Planning, The University of Texas at Austin

12:00 pm - 1:00 pm

**LUNCH** - Key Note Address

#### Measuring the Progress of Metropolitan Kansas City

Frank Lenk, Director of Research Services, Mid America Regional Council

1:30 pm - 3:00 pm

TRACK 1 - Morelia I

## How Are Environmental Indicators Going to be Used to Track Remediation Progress for the Solid Waste Program?

Moderator - Patti Tyler, R8 Science Liaison, U.S. EPA

## Overview of Environmental Indicators for EPA Waste Management and Cleanup Programs

Eric Burman, Senior Planning Analyst, Office of Solid Waste and Emergency Response, U.S. EPA

### Application of Ecological Environmental Indicators at RCRA and Voluntary Corrective Action Facilities

Steve Wharton, Risk Assessor, R8, U.S. EPA

#### Indicators and Endpoints - Making the Connection

Venessa Madden, Risk Assessor, R7, U.S. EPA







1:30 pm – 3:00 pm

TRACK 2 - Morelia II & III

#### What Are Appropriate Thresholds for Ecosystem Indicators?

Moderator - Karl Hermann, Senior Analyst, R8, U.S. EPA, Ecosystems Protection Program

#### Use of Thresholds in Landscape Assessments

Bruce Jones, Ph.D., Senior Scientist Environmental Sciences Division, National Exposure Research Laboratory, U.S. EPA

#### Panel Discussion on Reference Sites, Predictive Models, and Tolerance Values

Roger Blair, Ph.D., Branch Chief, National Health and Environmental Effects Research Laboratory, Western Ecology Division, Office of Research and Development, U.S. EPA

Don Huggins, Director Central Plains Center for Bioassessment University of Kansas

Karl Hermann, Senior Analyst Ecosystems Protection Program, R8, U.S. EPA

3:00 pm – 3:30 pm **BREAK** 

3:30 pm – 4:30 pm Workshop Wrap-Up and Next Steps - Morelia Room

Workshop Moderators